Relations Between Parent Involvement and Coparenting Relationship Quality

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Abstract

Coparenting involves the degree to which parents are able to successfully coordinate their parenting roles and responsibilities (McHale, 1995). Studies have shown that children whose parents have more supportive, cooperative coparenting relationships show more positive adjustment (e.g., Schoppe, Mangelsdorf, & Frosch, 2001). We also know that involvement of parents in their children's lives greatly enhances a child's development across the life span (e.g., McBride, Schoppe-Sullivan, & Ho, 2005). However, little research has examined relations between mothers' and fathers' individual involvement with their children and the quality of the coparenting relationship. In the "Parents and Preschoolers Study" conducted by Dr. Sarah Schoppe-Sullivan and her students, 113 families were assessed when their child was 3-5 years of age and again one year later. The individual involvement of the parents with their child was assessed using questionnaires. The quality of parents' coparenting relationship was measured using questionnaires and coded observations. My honors project addressed three questions: 1) How do levels of mother and father involvement with their children relate to the quality of their coparenting relationship? 2) How do discrepancies in involvement between mothers and fathers relate to the quality of their coparenting relationship? 3) Do these relations differ by child gender? My findings all seemed to suggest that when both parents are highly involved with their child, they then seem to perceive a poorer coparenting relationship. Not only was this found, but my results became largely more pronounced once reviewed closely by child gender suggesting that child gender does make a difference.

Relations Between Parent Involvement and Coparenting Relationship Quality

Parents play a significant role in the lives of their children. A parent teaches a child, at a young age, how to act around others, what is okay, and what is not. Children also watch their parents and learn by example in the first few years of their lives. It is important to note that in many families, children do not only learn from their individual parents' efforts, but also learn from observing and interacting with their parents as a unit. The idea of examining the influence of interparental relationships is derived from the family systems theory, which views the family as a whole rather than a sum of its parts and emphasizes that multiple family relationships may influence children's development (Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale, 2004).

Family systems theory has several key principles (P. Minuchin, 1985). The first is that the family system is a structured whole, as opposed to individual parts working separately. This whole is comprised of many parts or subsystems that function interdependently. The second principle is that the system's patterns are circular instead of being linear. In other words, decisions or actions by an individual in the family system affect everyone. The third principle is that the family is able to self-regulate in order to function smoothly. This essentially means that as changes occur, the family adapts relatively easily and then returns to a state of normal functioning. The fourth principle is that changes and the evolution of the family system are inevitable. In other words, families are able to reorganize and stabilize themselves in the event of a change or problem.

Coparenting Relationships

According to family systems theory, the family is divided into many different subsystems, and each subsystem has a responsibility to its own subsystem and the family whole. Each subsystem has a set of boundaries, and well-functioning subsystems stay within their

boundaries and yet are flexible when change occurs. The birth of a first child to a family is an event that results in the development of a special subsystem known as the parental subsystem or coparenting relationship -- the relationship between adults in the family with respect to parenting (S. Minuchin, 1974). The coparenting subsystem, given its focus on childrearing, is thought to be particularly important for children's development.

Contemporary researchers define coparenting as the degree to which parents are able to successfully coordinate their parenting roles and responsibilities (McHale, 1995). According to theoretical work by Feinberg (2003), coparenting includes several important aspects: *joint family management*, *support/undermining*, *childrearing agreement*, and *division of labor*. Joint family management involves parents' ability to work together to control behaviors and communication between family relationships (e.g., managing couple conflict, preventing coalitions from being formed). The second aspect of coparenting is support/undermining, which involves the extent to which parents are cooperative and provide emotional support to each other in parenting their child vs. undermining each other's parenting efforts through criticism or blame. The third aspect of coparenting is childrearing agreement which involves parents reaching an agreement about how their child will be raised (morals, needs, discipline, education, etc.). The final aspect of coparenting is the division of labor. Parents must decide who will do what parts of the childcare: financial, emotional support, medical issues, etc. All of these aspects of coparenting work together and affect one another (Feinberg, 2003).

Of the different components of coparenting, the support vs. undermining component has received the most research attention. Research consistently indicates that children whose parents have more supportive, cooperative coparenting relationships show more positive social and emotional adjustment, whereas children whose parents have coparenting relationships

characterized by hostile, undermining, competitive behaviors are at risk for behavior problems (McHale et al., 2002; Schoppe, Mangelsdorf, & Frosch, 2001). Relations between coparenting and children's adjustment are not simply due to the quality of individual parent-child relationships. According to a study done by Belsky, Putnam, and Crnic (1996), the levels of supportive or unsupportive coparenting interactions relate to the levels of inhibition a child may experience. For example, if a child's parents are constantly negative, the child may become bolder and less emotionally restricted. In fact, Belsky et al. (1996) found that coparenting processes explained whether children became more or less inhibited over time even after taking dyadic parenting processes into account. As expected, more unsupportive parents had children who became more uninhibited than they had been to begin with.

Not only does the coparenting relationship affect the child's development, but it also has shown effects on couples' marital quality over time. Schoppe-Sullivan et al. (2004) showed that coparenting quality in families with infants predicted change in marital quality across a 2.5-year period. In particular, marital quality may be especially affected by the quality of the coparenting relationship during the preschool years because of the increased involvement of fathers in childrearing (Schoppe-Sullivan et al., 2004). Fathers tend to be less involved with their children in infancy but increase their involvement later on in the preschool years. The greater involvement of parents' increases opportunities for both conflict and cooperation, and thus, spillover of these qualities into the marital relationship may become more common.

Parental Involvement

Another important part of the family system that is crucial for child development involves the individual relationships a child has with each of their parents. Decades of classic work have demonstrated links between the quality of parent-child relationships, and mother-child

relationships in particular, and children's social and emotional development (e.g., Ainsworth & Bell, 1974; Baumrind, 1966, 1967, 1971; Maccoby & Martin, 1983; Matas, Arend, & Sroufe, 1978). In other words, an involved, caring mother yields a well developed child. However, until recently, there has been far less research done on the links between the role and involvement of the father in the father-child relationship and children's development.

Father involvement is a topic of much interest for researchers today, not only because of the lack of previous research, but also because the expectations for, types, and levels of father involvement have changed over the years (Pleck & Masciadrelli, 2004). Historically, parents in two-parent families occupied traditional roles - in other words, mothers fulfilled the role of "caregiver" and fathers fulfilled the role of "breadwinner." In today's world, parents in many families are both working to help support the family, thus meaning there is more than one "breadwinner." With mothers as well as fathers working not only part-time but also full-time, there is greater demand for fathers to be involved in childrearing. Thus, many fathers have to take on two roles for the family: the breadwinner and the caregiver (Doherty & Beaton, 2004). Taking on a dual role means being fully committed to both responsibilities. Some fathers even become the primary caregivers of their children (i.e., "stay at home fathers").

Before examining father involvement more closely, it is important to define involvement. Involvement can be defined as consisting of three aspects (Pleck & Masciadrelli, 2004): paternal engagement (i.e., direct one-on-one interaction with the child), availability to the child (i.e., being accessible to the child when needed), and responsibility to and for the child (i.e., making sure the child is taken care of in all aspects - physically, emotionally, and financially). Pleck and Masciadrelli (2004) focused on two aspects of father involvement: (a) the time spent engaged with the child in either an activity or childcare responsibilities, and (b) the type and quality of the

dyadic relationship between the father and child. Pleck and Masciadrelli (2004) found that a large amount of time fathers spend with their children is spent playing during the week or weekend (39%), and the activities fathers spend the least amount of time with their children on are educational activities (3-5%). According to Hofferth, Pleck, Stueve, Bianchi, and Sayer (2002), fathers spend about one hour to an hour and twenty minutes a day engaged in play with the child whereas mothers spend about an hour and forty-six minutes in primary childcare and three hours in primary and secondary childcare per day. Fathers spend about twenty minutes a day engaged in educational activities with their child while mothers spend about thirty minutes a day.

Childcare is not as much of an automatic responsibility for fathers as it is for mothers (Finley & Schwartz, 2006). A majority of fathers are not highly active or involved in their child's daily life by some researchers' definitions. This does not mean they are not extremely involved in other ways. After all, a father does help to teach his children life lessons through other ways of involvement, including providing income, planning for the future, and protection (Palkovitz, 1997).

Pleck and Masciadrelli (2004) also discussed several factors that might explain why some fathers are highly involved in their children's lives whereas others are not. These factors are motivation (e.g., beliefs about fathers' roles), skills and self-confidence (e.g., knowledge about child development), social supports and stresses (e.g., spousal support), and institutional policies and practices (e.g., paternity leave). Thus, the amount of time a father spends with his child depends on a number of factors that vary in every family situation. The increased demand for father involvement combined with the increased levels of actual involvement has raised

questions about relations between parental involvement and the quality of family relationships - in particular, the quality of the coparenting relationship.

Parental Involvement and Coparenting

Katz and Gottman (1996) reported that increased marital problems related to increased withdrawal of involvement of the father from the child. This finding points out the importance of looking not only at the dyadic relationship between the father and child or mother and child, but also at the interparental relationship. As noted above, family systems theory views the family as consisting of interdependent parts, or subsystems, and thus, what happens in dyadic parent-child relationships affects the interparental relationship and vice-versa. According to Pleck and Masciadrelli (2004), fathers who are involved breadwinners as well as caregivers experience more stress in their lives due to this dual role. In this case, the most logical outcome of father involvement for marital satisfaction or coparenting relationship quality would be negative due to the stress in the father's life. Consistent with this perspective, Crouter, Perry-Jenkins, Huston, and McHale (1987) found that greater father involvement was related to less positive marital relationships. However, this may not be the case if both parents want the father to be highly involved. If this is the case, then marital satisfaction may not decrease in the face of high involvement. In fact, McBride and Rane (1998) found that the more fathers were involved in situations where the mother made it clear she wanted his involvement, the happier both parents were. In other words, when the parents are in agreement on how much involvement is enough or too much, they are better off in the quality of their coparenting relationship.

The overall level of father involvement in relation to coparenting quality may not be as important as the consistency in levels of involvement between mothers and fathers. For example, McHale (1995) found that differences in amount of marital power within parents'

relationships related to differences in levels of mother and father involvement in family interactions. In turn, these interaction differences were related to poorer marital functioning for families with daughters. To my knowledge, this has been the only study to examine differences between levels of mother and father involvement in relation to coparenting. Thus, questions remain unanswered regarding associations between maternal and paternal involvement and the quality of parents' coparenting relationships.

Child Gender Differences in Coparenting and Parental Involvement

Currently, there is not very much research available that looks at the effects child gender has on the coparenting relationship. What is out there, however, seems to show that there are significant differences between having a boy or girl. McHale (1995) explains how when a couple is experiencing problems within their marital relationship, and they have boys, they are more likely to then experience more conflict within their coparenting relationship. Along with this finding, Cowan et al. (1992) found that parents of boys are more likely to stay married despite the conflicts they may encounter. McHale (1995) attributes this to why boys may be at a higher risk for being exposed to hostile environments. In contrast, when it comes to girls, McHale (1995) found that when men encounter some distress in their marriage they are more likely to withdraw from involvement with their daughters (Amato, 1986; Belsky, Rovine, & Fisher, 1989).

In terms of parental involvement and child gender, Doherty and Beaton (2004) summed up the research by concluding that gender does not seem to influence the levels of involvement for mothers, but for fathers, they are more involved when their child is a male. This seems to make logical sense in that fathers would feel more connected to sons due to the common gender related activities and roles that are expected of males in our society. As McBride et al. (2002)

states, parenting and interacting with their sons may be more of a fundamental part in the identity of a father. This idea of fathers feeling more connected to their sons due to the common gender identification is found to be significant in the study conducted by Lindsey and Caldera (2006). In fact, they found that parents of sons expressed more positive and negative emotion during triadic play than parents of daughters. Similarly, McHale (1995) noted that having sons increases the probability that a couple will stay married. This may be due to the connections fathers feel with their sons. These findings all suggest that the child's gender may be an important factor to examine when studying coparenting and parent (especially father) involvement.

The Present Study

Studies have shown that children whose parents have more supportive, cooperative coparenting relationships show more positive social and emotional adjustment (e.g., Schoppe et al., 2001). We also know that involvement of both mothers and fathers in their children's lives greatly enhances a child's development across the life span. However, there is less research looking at the relationship between father involvement and child development than there traditionally has been on mother-child relationships. Also, little research has examined relations between mothers' and fathers' individual involvement with their children and the quality of the coparenting relationship.

In the present study the individual involvement of mothers and fathers with their preschool aged children was assessed using questionnaires. The quality of parents' coparenting relationship was measured using questionnaires and observations coded by trained researchers. This study addressed three specific questions: 1) How do levels of mother and father involvement in different types of activities with their children relate to the quality of their

coparenting relationship? 2) How do discrepancies (differences) in involvement between mothers and fathers relate to the quality of their coparenting relationship? 3) Do relations between parental involvement and coparenting differ based on child gender? I expected to see mixed results for the first question. Although I expected that greater mother involvement would coexist with higher coparenting relationship quality, I expected that greater father involvement would relate to both greater support and greater undermining (i.e., conflict) in the coparenting relationship. For the second question, I expected to see that greater discrepancies in involvement between parents would relate to a poorer quality coparenting relationship, based on the results of McHale (1995). Question three was exploratory given the lack of prior research on the effects of child gender on links between parental involvement and coparenting. However, based on the limited related research, I expected to find that greater father involvement, whether this was absolute or relative to mothers would be better for coparenting relationship quality when the family had a son. I did not expect to find this to be the case for families of girls. I also expected that mother involvement would be good for the coparenting relationship regardless of the child's gender. Because the current study was longitudinal, I was able to examine relations between parental involvement and coparenting both within and across time.

Method

Participants

The initial study sample included 113 families (mother, father, and child) who participated at Phase 1 of the study. All participating families had to meet three initial criteria: (a) Mothers and fathers had to be either married or cohabitating, (b) The participating child had to be between the ages of 3.5 and 4.5 years old, and (c) Mothers, fathers, and the designated child had to be able to attend sessions together at the campus laboratory. The families were

found and recruited, voluntarily on their part, through advertisements such as flyers placed in local preschools, a university newsletter, and referrals from other participants.

At the time of their first visit to the laboratory, the children were approximately 4.12 years old (*SD* = .53 years; 58 boys, 55 girls). The mother's age ranged from 22.15 years old to 56.17 years (*M* = 35.9 years; *SD* = 5.4). The father's age ranged from 25.08 years to 56.71 years (*M* = 37.6 years; *SD* = 5.84). The average size of the families who participated was 4.22 members (range: 3 to 9 members; *SD* = 0.98). Out of the children who participated, sixty percent were first born, while the remaining forty percent were classified as other (range: second born to sixth or later-born).

Out of the participating children, 76% were European American, 1% were Hispanic, 10% were African American, 1% were Asian, and the remaining 12% were from a mixed ethnic background. Of the mothers, 85% were European American, 2% were Hispanic, 9% were African American, 2% were Asian, and 2% were from a mixed ethnic background. Out of the fathers that participated, 84% were European American, 5% were Hispanic, 9% were African American, 1% were Asian, and 1% were from a mixed ethnic background. In terms of education, 83% of mothers and 81% percent of fathers had earned at least a college degree (range for mothers: high school degree to Ph.D; range for fathers: some high school to Ph.D). Employment for mothers and fathers ranged from zero hours to over fifty hours a week, with 43% of the mothers working zero hours and 42% percent of the fathers working forty-one to fifty hours a week. The families' income ranged from less than $10,000 a year to over $100,000 a year (Median = $71,000 to $80,000).

For Phase 2 of the study, 93 families participated. Thus, attrition rate from Phase 1 to Phase 2 was approximately 18%. In this sample, 47% were girls and 53% were boys. Of these

children, 78% were European American, 1% Hispanic, 7% African American, 1% Asian, and the remaining 13% were from a mixed ethnic background. Of the children's mothers, 88% were European American, 1% Hispanic, 7% African American, 2% Asian, and the remaining 2% were from a mixed ethnic background. Of the children's fathers, 86% were European American, 6% Hispanic, 6% African American, 2% Asian, and the remaining 1% were from a mixed ethnic background. Of the mother's education levels from Phase 2, 86% had at least a college degree (Range: some college to Ph.D. degree) with the median as a college degree. Of the father's education levels from Phase 2, 79% had at least a college degree (Range: high school degree to Ph.D. degree) with the median of a college degree. Finally, the family incomes ranged from less then $10,000 a year to over $100,000 a year (Median: $71,000 to $80,000).

Procedure

Parents were mailed questionnaires two weeks prior to their scheduled laboratory visit to be completed separately and prior to their visit. Once the families arrived at the laboratory for their visit, parents completed additional questionnaires about their child while the child completed a video-assisted questionnaire with a researcher. After these activities, the families were videotaped while taking part in an activity together: drawing a picture of their family together for 10 minutes. Procedures at Phase 2 of the study were identical, except that the videotaped activity was different: at Phase 2 families played a board game together for 15 minutes. After families came in for visits, they were compensated for their time. At phase one they received a gift card for thirty dollars to either Toys-R-Us or Target. For phase two, participants received $50 cash for their time. In the present study, I focused on the questionnaire measures of maternal and paternal involvement, as well as questionnaire and observational

measures of coparenting relationship quality. The means and standard deviations for all of the variables are reported in Table 1.

Measures

Mothers' and fathers' involvement with their children. Mothers' and fathers' involvement with their children was assessed through questionnaires. Both mothers and fathers reported on the levels of their involvement with their children in a variety of activities using the Parental Involvement in Activities (PIA) questionnaire, which was created for the present study. The PIA contains various questions from pre-existing survey measures of father involvement (e.g., the PSID-CDS; see Schoppe-Sullivan, McBride, & Ho, 2004; the DADS initiative; see Cabrera et al., 2004). On the PIA, the parent is asked to report on the frequency of their involvement in 31 different age-appropriate activities with their child (e.g., playing outside in the yard, watching videos, going to a museum) on a 6-point scale (1 = *not at all* to 6 = *more than once a day*). For the purposes of this study, I focused on the questions that measured the parent's involvement in play (e.g., "play outside in the yard, a park, or a playground with him/her?"; 8 items) and caregiving (e.g., "give him/her a bath?"; 10 items) activities. Using mothers' and fathers' scores on these scales, the overall levels and differences between mothers' and fathers' involvement in play and caregiving activities were considered. At Phase 1, Cronbach's alphas for mothers were .67 for caregiving and .76 for play, and for fathers were .71 for caregiving and .77 for play. At Phase 2, alphas for mothers were .69 for caregiving and .84 for play, and for fathers were .72 for caregiving and .82 for play.

Coparenting relationship quality. One way the coparenting relationship was assessed was through observations. Specifically, the videotaped family activities at Phases 1 and 2 were used for this purpose. The quality of parents' coparenting relationship with one another was

rated by trained observers using scales that measure important aspects of coparenting behavior: *pleasure*, *warmth*, *cooperation*, *displeasure*, *coldness*, and *competition*. These scales were first developed by Cowan and Cowan (1996) and have been used in previous research on coparenting (Schoppe et al., 2001; Schoppe-Sullivan et al., 2004). The *pleasure* scale captures the level of happiness the parents show while coparenting and their level of appreciation for the relationship their spouse has with their child. The *warmth* scale measures the extent to which parents show emotional support and caring behavior towards one another. *Cooperation* reflects how much the parents work together to help their child accomplish the goals of the activity. Ratings for *displeasure* include anything the parents might do or say towards one another showing that they do not like their partner's way of working with the child. *Coldness* reflects the extent to which one or both parents withdraw from family interaction. Finally, *competition* is a measure of the extent to which the parents use different and conflicting strategies for helping their child with the task and/or try to gain the child's attention away from the other parent.

Raters used a five-point scale (1 = *very low*; 5 = *very high*) to score each family on each aspect of coparenting. Separate teams of coders rated coparenting quality at Phases 1 and 2. For Phase 1, coders overlapped on a randomly selected 29% of the drawing episodes to determine reliability. Agreement within one scale point ranged from 97 to 100% (M = 99%), and gammas ranged from 0.70 to 0.94 (M = 0.86), reflecting acceptable reliability. For Phase 2, coders overlapped on 39% of the game episodes; agreement within one scale point ranged from 97 to 100% (M = 99%) and gammas ranged from 0.45 to 0.94 (M = .71). For the purposes of this study, the scales pleasure, warmth, and cooperation were combined (added together) to form a score for *supportive coparenting* at each phase. Similarly, the scales coldness, displeasure, and

competition were combined to form a score for *undermining coparenting* at each phase (see Schoppe et al., 2001).

The second way of assessing coparenting quality was through self-reports by parents. Both mothers and fathers completed the Perceptions of Coparenting Partners Questionnaire (PCPQ; Stright & Bales, 2003), which measures how parents feel about their coparenting relationship. The questionnaire contains a number of items concerning supportive coparenting and a number of questions concerning undermining coparenting (14 questions total). An example of supportive coparenting from the questionnaire is, "My partner backs me up when I discipline the study child." An example of undermining coparenting from the questionnaire is, "When the child wants something and I say no, my partner says yes." Each parent used a scale of 1 = *never* to 5 = *always* when filling out the questionnaire. At Phase 1, alphas for perceived support and undermining were .73 and .70 for mothers, and .77 and .58 for fathers. At Phase 2, alphas for mothers' perceptions of support and undermining were .67 and .65, and .73 and .65 for fathers.

Results

Analysis Plan

To address my first research question, composite scores for mothers' and fathers' involvement in caregiving and play activities (PIA questionnaire) at Phase 1 were created. These scores were correlated with the observations and parent reports of coparenting relationship quality. With respect to my second question, involvement discrepancy scores were created by subtracting mothers' scores from fathers' scores on the involvement measures. Thus, higher scores on the discrepancy measures indicate greater father involvement (relative to mothers), whereas lower scores indicate greater mother involvement (relative to fathers). These

discrepancies were then correlated with the measures of coparenting relationship quality. These analyses were repeated using data from Phase 2. Once these analyses were completed, each analysis was then redone separately by child gender for both Phase 1 and Phase 2 to address the third question: does child gender play a part in relations between parental involvement and coparenting? Finally, I looked across the two phases to see how a year's time would change or affect associations between coparenting quality and parental involvement. I first looked at how coparenting quality at Phase 1 related to the levels of parental involvement at Phase 2 and then vice versa. Secondly, I looked at these relations across the two phases separately by child gender.

Q1: Correlations Between Parent Involvement and Coparenting

Phase one. Correlations were computed between parents' reports of coparenting on the PCPQ and the measures of parent involvement (caregiving and play) for each parent (see Table 2). There turned out to be very few significant correlations; however, when mothers reported that they were more frequently involved in play with the child, mothers felt somewhat more supported by fathers, $r = .17$, $p < .10$. Overall, though, levels of mother and father involvement in caregiving and play were not associated with perceptions of coparenting at Phase 1. In terms of observed coparenting, there were no significant findings relating levels of mother or father involvement in caregiving and play with levels of observed support or undermining (Table 2).

Phase two. Surprisingly, Phase 2 yielded more significant results than Phase 1 had (Table 3). When mothers reported being more involved in caregiving, they felt as though they were less supported, $r = -.23$, $p < .05$, and more undermined by their partners, $r = .23$, $p < .05$. Similarly, when fathers reported being more involved in caregiving and play, mothers also felt less supported, $r = -.20$, $p < .10$, and $r = -.22$, $p < .05$, respectively, and more undermined, $r = .23$

and .26, respectively, *p*s < .05. Essentially, the more involved both parents felt they were, the less supported and more undermined mothers felt. Also, there were no significant findings for Phase 2 relating levels of mother or father involvement in caregiving and play with the levels of observed support and undermining (Table 3).

Q2: Correlations Between Involvement Discrepancies and Coparenting

Phase one. Only one association was found between discrepancies in involvement and parents' perceptions of coparenting at Phase 1 (Table 4). During the study, it was found that mothers felt less supported when their partners were more involved in playing with their child than they were, $r = -.17$, $p < .10$ (trend). No significant relations were found between involvement discrepancies and observed coparenting at Phase 1.

Phase two. When fathers were more involved than mothers in caregiving, mothers felt less supported, $r = -.39$, $p < .01$, and more undermined, $r = .38$, $p < .01$, by their partners (Table 5). However, with respect to observations of coparenting, when fathers were more involved in caregiving, relative to mothers, the couple was observed to be more supportive in their coparenting behaviors, $r = .23$, $p < .05$. In sum, when fathers' involvement is greater relative to that of mothers in caregiving, parents may show more supportive coparenting, but mothers may not necessarily feel more supported.

Q3a: Impact of Child Gender on Associations Between Parent Involvement and Coparenting

Phase one. When considering relations between parent involvement and parents' perceptions of coparenting separately for parents of boys vs. girls, no significant associations emerged. However, when considering observations of coparenting, in families with girls, when fathers were more involved in caregiving, the couple showed more undermining in their coparenting (Table 6), $r = .28$, $p < .05$. In families with boys, when fathers were more involved

in caregiving, the couple was observed to have somewhat more supportive coparenting, $r = .23$, $p < .10$. Finally, when fathers with sons were more involved in play, the couple showed somewhat less undermining coparenting, $r = -.22$, $p < .10$. Thus, overall, greater father involvement was positive for coparenting sons, but not necessarily for coparenting daughters.

Phase two. Phase 2 yielded more significant or trend-level associations between parental involvement and parents' reports of coparenting than Phase 1 (Table 7). When mothers of girls were more involved in caregiving, mothers felt more undermined, $r = .26$, $p < .10$. Similarly, when fathers of girls were more involved in play, then mothers felt more undermined, $r = .32$, $p < .05$. In families with boys, we found similar results. When mothers of boys were more involved in caregiving, they then felt less supported by their partners, $r = -.27$, $p < .10$. When fathers of boys were more involved in caregiving, fathers then felt less supported by their partners, $r = -.27$, $p < .10$. Essentially, these correlations showed that for parents of both girls and boys, higher parent involvement was related to negative feelings about the coparenting relationship.

For Phase 2, no significant relations between parental involvement and observed coparenting were found in families of girls. However, there were some significant results for families with sons. When mothers of sons were more involved in caregiving and play, the couple showed less supportive coparenting, $r = -.36, -.33$, $p < .05$. These results suggest that greater mother involvement may not always be positive for families of boys, whereas parent involvement is not related to observed coparenting in families with daughters.

Q3b: Impact of Child Gender on Associations Between Involvement Discrepancies and Coparenting

Phase one. With respect to parents' reports of coparenting, when fathers of girls were more involved in play relative to mothers, mothers felt somewhat less supported, $r = -.24$, $p < .10$ (Table 8). There were no other associations of significance between involvement discrepancies and coparenting when examined separately by child gender. When considering observations of coparenting, only one significant association was found for families of girls. When fathers of girls were more involved in caregiving relative to mothers, the couple showed more undermining coparenting, $r = .30$, $p < .05$. In contrast, when fathers of boys were more involved in caregiving relative to mothers, parents showed more supportive coparenting behaviors, $r = .23$, $p < .10$, and when fathers were more involved in play with their sons (relative to mothers) parents showed less undermining behaviors in coparenting, $r = -.29$, $p < .05$. Thus, greater father relative involvement was positive for coparenting sons, but not necessarily for coparenting daughters.

Phase two. For Phase 2, there were no significant relations between parental involvement discrepancies and either parents' perceptions or observations of coparenting for families of girls (Table 9). However, there was one significant correlation with parents' perceptions of coparenting for families of boys: When fathers were more involved in play with their sons relative to mothers, mothers felt less supported, $r = -.30$, $p < .05$. Moving on to the relations between involvement discrepancies and observed coparenting, there were some interesting results for families of boys. When fathers were more involved in caregiving and play for their sons (relative to mothers), the couple showed more supportive coparenting behaviors, $r = .45, .33$, $p < .01, .05$. These results suggest that father involvement in caregiving and play with their sons is positive for the observed coparenting relationship.

Longitudinal Relations Between Parent Involvement and Coparenting

Q1: Parents' reports of coparenting and observations from Phase 2, with parental involvement from Phase 1. When mothers were more involved in play at Phase 1 and fathers were more involved in caregiving at Phase 1 with their child, mothers felt somewhat more undermined at Phase 2, $r = .20, .17$, $ps < .10$ (Table 10). Also, when mothers were more involved in play with their child at Phase 1, the couple was observed to have more undermining behaviors in their coparenting relationship, $r = .24$, $p < .05$, at Phase 2. Overall, these results suggest that more mother involvement in play at Phase 1 resulted in more negative observed coparenting one year later. In addition, more father involvement in caregiving and mother involvement in play were related to mothers' feelings of greater undermining one year later.

Q1: Parents' reports of coparenting and observations from Phase 1, with parental involvement from Phase 2. When mothers felt less supported at Phase 1, fathers were more involved in the caregiving of their child at Phase 2, $r = -.29$, $p < .01$ (Table 11). When mothers felt less supported and more undermined at Phase 1, fathers were more involved in play at Phase 2, $r = -.27, .21$, $ps < .01, .05$. There were no significant findings for observed coparenting at Phase 1 in relation to parental involvement from Phase 2. Essentially, when mothers felt limited support at year 1, fathers were then more involved a year later.

Q2: Correlations between involvement discrepancies from Phase 1 and coparenting reports and observations from Phase 2. Analyses correlating involvement discrepancies from Phase 1 with coparenting reports from Phase 2 turned out to not be significant (Table 12). However, involvement discrepancies from Phase 1 and observations from Phase 2 were significantly correlated. When fathers were more involved in play relative to mothers at Phase 1, the couple was observed to have less undermining in their coparenting at Phase 2, $r = -.27$, $p <$

.05. Overall, when fathers were more involved at Phase 1, the couples showed less negative coparenting a year later.

Q2: Correlations between involvement discrepancies from Phase 2 and coparenting reports and observations from Phase 1. When mothers felt less supported at Phase 1, fathers were then more involved in play (relative to mothers) at Phase 2, $r = -.31$, $p < .01$ (Table 13). Similarly, when mothers felt more undermined at Phase 1, fathers were marginally more involved in play, relative to mothers, at Phase 2, $r = .18$, $p < .10$. In terms of the correlations between involvement discrepancies from Phase 2 and coparenting observations from Phase 1, no significant correlations were found. These results suggest that when mothers felt less supported or more undermined, fathers were then more involved in play with their child a year later.

Q3: Parents' reports of coparenting and observations from Phase 2, with parental involvement from Phase 1, by child gender. For families of girls, only one significant result was found when examining the correlations between Phase 1 parent involvement and Phase 2 perceptions of coparenting: When mothers were more involved in play at Phase 1 with their daughters, mothers felt somewhat more undermined at Phase 2, $r = .27$, $p < .10$ (Table 14). No significant correlations were found between parental involvement from Phase 1, and coparenting reports from Phase 2, for families of boys. For families with girls, when mothers were more involved in caregiving at Phase 1, the couple was observed to have more supportive coparenting, $r = .33$, $p < .05$, in their relationship at Phase 2. Father involvement was not significantly correlated with coparenting a year later in families with girls.

For families with sons, when the mother was more involved in caregiving at Phase 1, the couple showed somewhat more undermining behavior in their coparenting at Phase 2, $r = .26$, $p < .10$. When mothers were more involved in play with their sons at Phase 1, the couple was then

observed to have less supportive and more undermining behavior in their coparenting relationship a year later, $r = -.27, .28$, $p < .10$ (trends). Essentially, in families with boys, when mothers were more involved at Phase 1, the couple had a more negative coparenting relationship a year later, whereas for families of girls, the effects of maternal involvement were mixed, perhaps due to differences in type of involvement (i.e., caregiving vs. play) or measure of coparenting (i.e., Self-reports vs. observations).

Q3: Parents' reports of coparenting and observations from Phase 1, and parental involvement from Phase 2, by child gender. When mothers of daughters felt less supported by their partner at Phase 1, fathers were more involved in play at Phase 2, $r = -.39$, $p < .01$ (Table 15). When mothers of daughters felt more undermined at Phase 1, fathers were then more involved, a year later at Phase 2, in play, $r = .35$, $p < .05$. In terms of reports of coparenting from Phase 1 with parental involvement from Phase 2 for families with boys, there were no significant results. Overall, when mothers of daughters felt less supported and more undermined, fathers were then more involved in play a year later.

For results regarding observations from Phase 1 and parental involvement from Phase 2, only one significant correlation was found for families of girls, and none for families of boys. When parents of girls were observed to be less undermining at Phase 1, mothers were more involved in caregiving at Phase 2, $r = -.26$, $p < .10$. These results support the idea that for families of girls, supportive coparenting relationships at Phase 1 are linked to less father involvement, and more mother involvement, at Phase 2.

Q3: Involvement discrepancies from Phase 1, with coparenting from Phase 2, by child gender. The correlations of involvement discrepancies from Phase 1 with coparenting reports from Phase 2 for both families of girls and boys were not significant (Table 16). However, when

fathers were more involved in caregiving (relative to mothers) with their daughters at Phase 1, the couple then showed less supportive coparenting at Phase 2, $r = -.33$, $p < .05$. When fathers were more involved in caregiving (relative to mothers) with their sons at Phase 1, the couple was observed to have less undermining behaviors in their coparenting at Phase 2, $r = -.27$, $p < .10$ (trend). Finally, when fathers were more involved in play, relative to mothers, with their sons at Phase 1, the couple was observed to have less undermining behavior in their coparenting at Phase 2, $r = -.42$, $p < .01$. Essentially, fathers' involvement for girls at Phase 1 appears to lead to less supportive coparenting a year later. However, father involvement for boys at Phase 1 is beneficial to the coparenting relationship at Phase 2.

Q3: Involvement discrepancies from Phase 2, with coparenting from Phase 1, by child gender. When mothers with daughters felt less supported by their partner at Phase 1, fathers were then more involved in play, relative to mothers, at Phase 2, $r = -.39$, $p < .01$. When fathers with daughters felt less supported at Phase 1, fathers were more involved in play, relative to mothers, at Phase 2, $r = -.30$, $p < .05$. Similarly, when mothers of sons felt less supported by their partners at Phase 1, fathers were more involved in caregiving (relative to mothers) at Phase 2, $r = -.26$, $p < .10$. Finally, when couples with daughters showed more undermining behaviors in their coparenting at Phase 1, fathers were more involved in caregiving, relative to mothers, at Phase 2, $r = .38$, $p < .05$. Overall, when parents of girls felt less supported and showed negative coparenting at Phase 1, fathers were more involved a year later.

Discussion

The purpose of this study was to examine coparenting relationship quality and its associations with the dyadic relationships between the mother and child and between the father and child. This study looked to answer three questions: (1) How do levels of mother and father

involvement relate to the quality of the coparenting relationship? (2) How do discrepancies in levels of involvement relate to the quality of the coparenting relationship? (3) How does child gender affect the relations between mother and father involvement and coparenting quality? The findings relevant to each of these questions will be discussed in further detail.

To help answer the first question, I looked at the feelings of support and undermining for both mothers and fathers as well as coparenting observations in relation to reports of involvement at the individual phases and across Phase 1 and Phase 2. From Phase 1, there was not that much of significance to report. In other words, relations between parent involvement and coparenting were absent. However, at Phase 2, mothers were found to be feeling significantly less supported and more undermined by their partner when they and their partners were both highly involved with their child. This suggests that parents, especially mothers, may struggle with dual roles. According to Doherty and Beaton (2004), both parents now have to take on the dual roles of caregiver and breadwinner in many families. However, this is a relatively recent change from the traditional roles of mothers as primary caregivers and fathers as breadwinners. These findings may suggest that we are still transitioning from the traditional roles to a new family dynamic where child care is equally expected of both mothers and fathers. As such, Pleck and Masciadrelli (2004) and Crouter, Perry-Jenkins, Huston, and McHale (1987) argued that under some circumstances father involvement may be stressful for families.

More interesting findings emerged when looking across the two phases of the study. There was some indication that when both parents were more involved at Phase 1, coparenting was poorer at Phase 2, consistent with the results from Phase 2 only. In addition, when mothers reported feeling more supported by their partners at Phase 1, fathers were actually less involved with their child at Phase 2. It is possible that when things were going well in the coparenting

relationship, fathers felt "off the hook" or less responsible for child care at Phase 2. Alternatively, poorer coparenting at Phase 1 may have sparked greater father involvement at Phase 2. This greater father involvement may be necessary because of the developmental changes that the child is undergoing at this time in terms of the transition into formal schooling. In fact, research suggests that it is normative for fathers to become more involved with their children as their children enter the school years (Pleck & Masciadrelli, 2004).

The second question that I looked to answer dealt with discrepancies in the levels of involvement between mothers and fathers. More specifically this question considered the difference in the levels of caregiving and play between fathers and mothers (fathers minus mothers) in relation to both the feelings of support versus undermining and the observed coparenting at both the individual phases and across the phases. At the individual phases, especially at Phase 2, it was found that mothers felt less supported and more undermined when fathers did not follow traditional parenting roles (i.e., when fathers were more involved relative to mothers in caregiving). As Hofferth et al. (2002) found, mothers tend to spend more time engaged with their child, especially in caregiving activities, as opposed to fathers who spend much less time engaged with their child. Even though society has called for a more active role for fathers, mothers in most families are still the primary caregivers. Thus, in families where this is not the case, there may be problems, given that this change in the amount of involvement fathers are having in their child's life is a new dynamic that mothers have to adjust to and work with. Interestingly, however, greater father relative involvement was positive for observed coparenting at Phase 2. This difference in findings could be due to the more objective perspective of the observers, who view involved fathers as increasing observed coparenting support.

The picture of my findings grew even more complex when looking at relations between involvement discrepancies and coparenting across the phases. Similar to the results at Phase 2, when mothers felt more positive about the coparenting relationship at Phase 1, fathers were less involved relative to mothers at Phase 2 (see possible reasons described above). However, families in which fathers were more involved relative to mothers in play at year 1 actually showed less undermining behavior at year 2. My results suggest, then, that mothers and fathers may be adjusting to these changes in father involvement from year 1 to year 2. Whereas higher father involvement was not necessarily positive for coparenting concurrently, greater father involvement was related to better coparenting over time. Much like what family systems theory suggests (P. Minuchin, 1985), families may be self-regulating in response to the introduction of increased parental involvement.

The third question I looked at dealt with the effects child gender had on relations between parent involvement and coparenting relationship quality. In fact, most of my findings became more pronounced once I looked at them separately by child gender. Considering the results at Phase 1, a consistent pattern emerged: father involvement was positive for coparenting in families with sons, but not necessarily in families with daughters. When looking at the relations between fathers' relative involvement and coparenting at both phases, again greater father relative involvement was positive for families with sons (not daughters). As previous researchers have noted (e.g., Doherty & Beaton, 2004), mother involvement does not seem to be affected by child gender, but father involvement is higher for sons than for daughters. Thus, if father involvement with sons is expected, or a more integral part of fathers' identities, it may be more clearly positive for the coparenting relationship.

When looking at results across the phases separately by child gender, findings confirmed and extended those already discussed. As noted above, I found that when mothers felt more support from their partner at Phase 1, fathers then decreased their levels of involvement at Phase 2, but once I looked at these results separately by child gender, this was only a significant finding in families with daughters. This finding of father involvement decreasing following positive coparenting with daughters is consistent with the idea that parenting sons may be a more integral part of identity for fathers (McBride et al., 2002). Thus, fathers may never be "off the hook" with respect to parenting of and involvement with their sons.

Strengths and Limitations. This study had many strengths as well as limitations. This study was longitudinal, and as such I was able to see how father involvement was negative for coparenting at the individual phases or years, which could be due to a number of factors, but father involvement was good in the long run across the phases. Another strength of this study is the fact that not only were mothers' reports of their own involvement and fathers' involvement used, but fathers' reports of their own involvement were also used. This allowed me to examine the perspectives of both parents. Also, I included observations of coparenting as well, which provides more information than just the parents' perspectives on aspects of coparenting and involvement.

Some of these strengths are actually limitations as well. First, we had mothers and fathers separately report on their own levels of involvement and this could have resulted in an over- or underestimate on the parents' part. This could mean that our highly involved fathers were less involved than we have recorded or our much less involved fathers were actually much more involved in their child's life through caregiving and/or play. With a more accurate depiction of these involvement levels, we could then have a much more accurate understanding

of how and how much parental involvement affects coparenting and vice versa. To accomplish this level of accuracy, we could have used a time diary similar to what was used in the study done by Hofferth et al. (2002). We also conducted all of our observations in a laboratory setting as opposed to in-home visits as done in the study by Schoppe-Sullivan et al. (2004). Home observations could have allowed for the family to relax more and show their "true colors" a bit more than they may have done in the laboratory setting. In addition, these visits were brief. The families came in twice over two years and were only observed for about thirty minutes. Had we spent more time observing the families, they may have become more comfortable with the setting and our results may have then been more accurate as well. Finally, there could always be other life factors such as employment conditions, extended family, friends, total number of children, etc. that could potentially affect the coparenting relationship, parents' levels of involvement, or the relations between the two.

Conclusions and Future Research. There is still so much in question about the coparenting relationship and parental involvement. In the future, it would be interesting for researchers to look at how the age of the child affects parental involvement levels, coparenting relationship quality, and the relations between them. We know now that fathers are already less involved when their child is an infant, but become more involved as their child gets older and more able to take part in shared activities. Some have also suggested that the toddler and preschool years are similar to the middle adolescent years or teenage years. Just like the preschool years, in which children seek autonomy from parents, middle adolescents are beginning to branch out in their freedom by going out with friends at night, driving, etc. These new found freedoms could be a cause for strain on the parents' coparenting relationship and may also affect how involved parents are or can be. It would also be interesting to take into account if

a child has siblings. Maybe the more children a family has, the less involved parents are with one child and the less supportive the coparenting relationship is. Or, parents may have to be more supportive of each other when they have multiple children.

Overall, results from this study suggest a complex relationship between parent involvement and coparenting. Whether parent involvement, particularly father involvement, is positive or negative for the coparenting relationship seemed to depend on a number of factors, including child gender, time, and assessment method (questionnaires vs. observations). Father involvement has been said to not only have positive effects on children, but also the coparenting relationship. This study suggests that this is the case when the child is boy, but not necessarily in families with daughters. In addition, father involvement was negative for the coparenting relationship when both involvement and coparenting were measured at the same time, but over time there was more evidence that father involvement could also be positive for coparenting. Finally, father involvement tended to be linked to negative perceptions of coparenting by parents, especially mothers, but to positive perceptions of coparenting by observers.

In conclusion, evidence suggests that fathers' involvement is a growing trend in family dynamics, and that these changes are something that both mothers and fathers need to adjust to due to the dual roles that both parents are having to take on in today's society. With more research on parental involvement and coparenting we can better understand why people do what they do and how to fix any potential problems that may affect child and family functioning. Over time, it will be interesting to see if in future generations, high levels of father involvement are the most common family dynamic and if families have fully adjusted to the dual roles that both mothers and fathers play in the family. As demonstrated in my research, family systems theory provides an excellent framework for understanding the relations among relationships - in

other words, what happens with one relationship such as a dyadic parent-child relationship affects other relationships such as the coparenting relationship and vice-versa. Furthermore, the multiple roles parents have in various relationships all play a significant part in shaping children's development in the family context.

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Table 1

Means and Standard Deviations of Study Variables

	Phase 1			Phase 2		
	M	*SD*	Range	*M*	*SD*	Range
Parental Involvement						
CaregivingM	4.05	.55	2.40-5.44	3.56	.62	2.30-5.20
PlayM	3.49	.67	2.00-5.25	3.19	.78	1.13-5.13
CaregivingF	3.53	.53	1.80-4.90	3.29	.54	1.80-4.80
PlayF	3.71	.67	2.38-5.63	3.48	.72	1.80-4.80
Coparenting: Reports						
M Felt Support	4.13	.47	2.71-5.00	4.13	.46	3.00-5.00
F Felt Support	4.18	.51	2.14-5.00	4.23	.45	2.71-5.00
M Felt Undermining	1.60	.44	1.00-2.71	1.57	.41	1.00-2.71
F Felt Undermining	1.53	.38	1.00-2.57	1.54	.41	1.00-2.86
Coparenting: Observations						
Support	8.73	1.76	5.00-13.00	10.19	1.58	6.00-13.00
Undermining	5.58	1.77	3.00-11.00	4.20	1.33	3.00-11.00

Note. M = mother; F = father.

Table 2

Correlations of Parents' Reports of Coparenting and Observations of Coparenting with Parental Involvement (Phase 1)

	Parent Involvment			
Coparenting				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.03	**.17**$^{+}$	-.11	-.04
F Felt Support	.03	-.01	.03	.05
M Felt Undermining	.05	.04	.03	.02
F Felt Undermining	.08	.14	-.01	-.00
Observations				
Support	-.04	-.07	.01	.04
Undermining	-.10	-.01	.07	-.09

Note. M = mother; F = father.
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 3

Correlations of Parents' Reports of Coparenting and Observations of Coparenting with Parental Involvement (Phase 2)

	Parent Involvment			
Coparenting				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	**-.23***	.07	**-.20^{+}**	**-.22***
F Felt Support	-.08	.09	-.14	-.06
M Felt Undermining	**.23***	.14	**.23***	**.26***
F Felt Undermining	.06	-.13	.03	.02
Observations				
Support	-.15	-.05	.16	.03
Undermining	.11	.09	.14	-.07

Note. M = mother; F = father.
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 4

Correlations Between Involvement Discrepancies and Coparenting (Phase 1)

Coparenting	Involvement Discrepancies	
	Carediff	Playdiff
Reports		
M Felt Support	-.06	**-.17**$^{+}$
F Felt Support	-.00	.05
M Felt Undermining	-.01	-.02
F Felt Undermining	-.07	-.12
Observations		
Support	.04	.09
Undermining	.13	-.07

Note. M = mother; F = father.
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 5

Correlations Between Involvement Discrepancies and Coparenting (Phase 2)

Coparenting	Involvement Discrepancies	
	Carediff	Playdiff
Reports		
M Felt Support	**-.39****	.02
F Felt Support	-.06	-.05
M Felt Undermining	**.38****	-.02
F Felt Undermining	-.00	-.02
Observations		
Support	**.23***	.07
Undermining	-.00	-.14

Note. M = mother; F = father.
$^{+}p < .10$ $*p < .05$ $**p <$

Table 6

Correlations of Parents' Reports of Coparenting and Observations of Coparenting with Parental Involvement By Child Gender (Phase 1)

	Parent Involvment			
Coparenting				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.05 (.02)	.20 (.20)	-.11 (-.09)	-.10 (.05)
F Felt Support	.09 (-.02)	-.04 (-.06)	.18 (-.15)	.04 (.06)
M Felt Undermining	.12 (-.04)	.14 (-.11)	.05 (-.02)	.08 (-.08)
F Felt Undermining	-.00 (.13)	.08 (.17)	-.16 (.10)	.06 (-.08)
Observations				
Support	.01 (-.08)	-.00 (-.13)	-.18 **(.23^{+})**	.03 (.06)
Undermining	-.12 (-.08)	-.16 (.15)	**.28*** (-.17)	-.00 **(-.22^{+})**

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 7

Correlations of Parents' Reports of Coparenting and Observations of Coparenting with Parental Involvement By Child Gender (Phase 2)

	Parent Involvment			
Coparenting				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.18 **(-.27^{+})**	-.00 (.17)	-.22 (-.17)	-.20 (-.24)
F Felt Support	-.05 (-.10)	.19 (-.04)	-.03 **(-.27^{+})**	-.02 (-.11)
M Felt Undermining	**.26^{+}** (.18)	.18 (.07)	.18 (.24)	**.32*** (.17)
F Felt Undermining	.13 (.01)	-.14 (-.11)	-.11 (.19)	.13 (-.09)
Observations				
Support	.03 **(-.36*)**	.15 **(-.33*)**	.13 (.16)	-.03 (.07)
Undermining	-.01 (.20)	.13 (.07)	.03 (.23)	-.11 (-.05)

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 8

Correlations Between Involvement Discrepancies and Coparenting Separately by Child Gender (Phase 1)

Coparenting	Involvement Discrepancies	
	Carediff	Playdiff
Reports		
M Felt Support	-.04 (-.08)	**-.24^{+}** (-.14)
F Felt Support	.07 (-.09)	.00 (.10)
M Felt Undermining	-.05 (.02)	-.04 (.03)
F Felt Undermining	-.12 (-.02)	-.01 (-.21)
Observations		
Support	-.15 **(.23^{+})**	.03 (.16)
Undermining	**.30*** (-.06)	.12 **(-.29*)**

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 9

Correlations Between Involvement Discrepancies and Coparenting Separately by Child Gender (Phase 2)

Coparenting	Involvement Discrepancies	
	Carediff	Playdiff
Reports		
M Felt Support	-.05 (.10)	-.15 **(-.30*)**
F Felt Support	.02 (-.13)	-.17 (-.05)
M Felt Undermining	-.07 (.01)	.09 (.06)
F Felt Undermining	-.17 (.14)	.21 (.03)
Observations		
Support	-.00 **(.45**)**	-.14 **(.33*)**
Undermining	.01 (-.01)	-.19 (-.10)

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$

Table 10

Correlations of Parents' Reports of Coparenting and Observations of Coparenting from Phase 2 with Parental Involvement from Phase 1

	Parent Involvment (Phase 1)			
Coparenting (Phase 2)				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.05	-.10	-.14	-.17
F Felt Support	-.08	.02	.03	.05
M Felt Undermining	.17	**.20**$^{+}$	**.17**$^{+}$	.16
F Felt Undermining	.03	.07	-.14	-.06
Observations				
Support	.07	-.07	-.06	-.05
Undermining	.16	**.24***	.01	-.08

Note. M = mother; F = father.
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 11

Correlations of Parents' Reports of Coparenting and Observations of Coparenting from Phase 1 with Parental Involvement from Phase 2

	Parent Involvment (Phase 2)			
Coparenting (Phase 1)				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.06	.12	**-.29****	**-.27****
F Felt Support	-.05	.08	-.01	-.11
M Felt Undermining	.03	-.04	.09	**.21***
F Felt Undermining	.02	-.05	.15	.05
Observations				
Support	-.02	-.05	.03	.02
Undermining	-.14	-.04	.07	-.12

Note. M = mother; F = father.
$^{+}p < .10$ $*p < .05$ $**p < .01$

Table 12

Correlations Between Involvement Discrepancies from Phase 1 and Coparenting from Phase 2

Coparenting	Involvement Discrepancies (Phase 1)	
(Phase 2)	Carediff	Playdiff
Reports		
M Felt Support	-.06	-.06
F Felt Support	.08	.03
M Felt Undermining	.00	-.04
F Felt Undermining	-.12	-.10
Observations		
Support	-.09	.02
Undermining	-.12	**-.27***

Note. M = mother; F = father
$^{+}p < .10$ $*p < .05$ $**p < .01$

Table 13

Correlations Between Involvement Discrepancies from Phase 2 and Coparenting from Phase 1

Coparenting	Involvement Discrepancies (Phase 2)	
(Phase 1)	Carediff	Playdiff
Reports		
M Felt Support	-.18	**-.31****
F Felt Support	.03	-.15
M Felt Undermining	.05	**.18**$^{+}$
F Felt Undermining	.08	.09
Observations		
Support	.01	.06
Undermining	.17	-.07

Note. M = mother; F = father
$^{+}p < .10$ $*p < .05$ $**p < .01$

Table 14

Correlations of Parents' Reports of Coparenting and Observations of Coparenting from Phase 2 with Parental Involvement from Phase 1 by Child Gender

	Parent Involvment (Phase 1)			
Coparenting (Phase 2)				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.03 (-.06)	-.16 (-.02)	-.17 (-.10)	-.25 (-.06)
F Felt Support	-.08 (-.08)	-.02 (.08)	.15 (-.14)	.11 (-.06)
M Felt Undermining	.21 (.11)	**.27**$^{+}$ (.10)	.21 (.11)	.22 (.07)
F Felt Undermining	.04 (.02)	.05 (.09)	-.23 (-.03)	.03 (-.16)
Observations				
Support	**.33*** (-.20)	.09 **(-.27**$^{+}$**)**	-.15 (.03)	.01 (-.15)
Undermining	.03 **(.26**$^{+}$**)**	.19 **(.28**$^{+}$**)**	.12 (-.08)	.02 (-.20)

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 15

Correlations of Parents' Reports of Coparenting and Observations of Coparenting from Phase 1 with Parental Involvement from Phase 2 By Child Gender

	Parent Involvment (Phase 2)			
Coparenting (Phase 1)				
	CaregivingM	PlayM	CaregivingF	PlayF
Reports				
M Felt Support	-.18 (.11)	.12 (.17)	-.25 (-.25)	**-.39**** (-.07)
F Felt Support	-.10 (.03)	.17 (-.03)	.14 (-.15)	-.21 (.04)
M Felt Undermining	.22 (-.19)	.10 (-.21)	.13 (-.01)	**.35*** (.00)
F Felt Undermining	-.09 (.09)	-.15 (.02)	.06 (.15)	.16 (-.10)
Observations				
Support	-.02 (.00)	-.06 (-.02)	-.07 (.19)	.04 (.04)
Undermining	**-.26**$^{+}$ (-.00)	-.06 (-.00)	.22 (-.08)	-.10 (-.13)

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$.

Table 16

Correlations Between Involvement Discrepancies from Phase 1 and Coparenting from Phase 2, by Child Gender

Coparenting	Involvement Discrepancies (Phase 1)	
(Phase 2)	Carediff	Playdiff
Reports		
M Felt Support	-.10 (-.02)	-.08 (-.04)
F Felt Support	.17 (-.04)	.11 (-.12)
M Felt Undermining	.00 (-.01)	-.03 (-.04)
F Felt Undermining	-.20 (-.04)	-.02 (-.20)
Observations		
Support	**-.33*** (.19)	-.06 (.13)
Undermining	.07 **(-.27^{+})**	-.13 **(-.42**)**

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ $*p < .05$ $**p < .01$

Table 17

Correlations Between Involvement Discrepancies from Phase 2 and Coparenting from Phase 1 by Child Gender

Coparenting	Involvement Discrepancies (Phase 2)	
(Phase 1)	Carediff	Playdiff
Reports		
M Felt Support	-.06 (**-.26**$^{+}$**)**	**-.39**** (-.20)
F Felt Support	.17 (-.16)	**-.30*** (.07)
M Felt Undermining	-.07 (.16)	.18 (.17)
F Felt Undermining	.07 (.05)	.25 (-.08)
Observations		
Support	-.07 (.13)	.09 (.05)
Undermining	**.38*** (-.07)	-.03 (-.11)

Note. M = mother; F = father; Girls (Boys).
$^{+}p < .10$ *$p < .05$ **$p < .01$

APPENDIX: STUDY MEASURES

Parental Involvement in Activities

The next questions are about things you may do with your child. How many times in the past month have you done any of the following with your child? Please circle your answer for each question.

	More than once a day	About once a day	A few times a week	A few times a month	Rarely	Not at all
1. Sing nursery rhymes like "Jack and Jill" or songs with him/her?	6	5	4	3	2	1
2. Watch TV or videos with him/her?	6	5	4	3	2	1
3. Dance with him/her?	6	5	4	3	2	1
4. Read stories to him/her?	6	5	4	3	2	1
5. Tell stories to him/her?	6	5	4	3	2	1
6. Play outside in the yard, a park, or a playground with him/her?	6	5	4	3	2	1
7. Play chasing games?	6	5	4	3	2	1
8. Have relatives visit you?	6	5	4	3	2	1
9. Take your child with you to visit relatives?	6	5	4	3	2	1
10. Take your child on an outing such as shopping, to the park or a picnic?	6	5	4	3	2	1
11. Take your child with you to a religious service or religious event?	6	5	4	3	2	1
12. Go to a restaurant or out to eat with him/her?	6	5	4	3	2	1
13. Take him/her to any type of a museum such as a children's museum, scientific, art, or historical museum?	6	5	4	3	2	1
14. Take him/her for a ride on your shoulders or back?	6	5	4	3	2	1
15. Turn him/her upside down or toss him/her up in the air?	6	5	4	3	2	1
16. Play together with toys for building like blocks, Tinkertoys, Lincoln Logs, or Legos?	6	5	4	3	2	1
17. Visit friends with your child?	6	5	4	3	2	1
18. Take your child to play with other children?	6	5	4	3	2	1

	More than once a day	About once a day	A few times a week	A few times a month	Rarely	Not at all
19. Put him/her to bed?	6	5	4	3	2	1
20. Give him/her a bath?	6	5	4	3	2	1
21. Roll a ball, toss a ball, or play games with a ball?	6	5	4	3	2	1
22. Go for a walk with him/her?	6	5	4	3	2	1
23. Bounce him/her on your knee?	6	5	4	3	2	1
24. Take your child to the doctor?	6	5	4	3	2	1
25. Stay home to care for your child when s/he is ill?	6	5	4	3	2	1
26. Help get him/her dressed?	6	5	4	3	2	1
27. Help him/her use the toilet?	6	5	4	3	2	1
28. Help your child brush his/her teeth?	6	5	4	3	2	1
29. Prepare meals for your child?	6	5	4	3	2	1
30. Assist your child with eating?	6	5	4	3	2	1
31. Get up with your child when s/he wakes up in the middle of the night?	6	5	4	3	2	1

PCPQ

Please circle the number corresponding to how often this happens:

Never	**Rarely**	**Occasionally**	**Frequently**	**Always**
1	2	3	4	5

	Never		**Occasionally**		**Always**
1. My partner backs me up when I discipline the study child.	1	2	3	4	5
2. My partner competes with me for the child's attention.	1	2	3	4	5
3. When my partner doesn't agree with how I am handling the child, he/she calmly discusses it with me.	1	2	3	4	5
4. When I ask for my partner's help when trying to get the child to bed, he/she ignores me.	1	2	3	4	5
5. My partner criticizes my parenting in front of the child.	1	2	3	4	5
6. When I tell the child to do something, my partner contradicts me.	1	2	3	4	5
7. My partner and I use similar parenting techniques.	1	2	3	4	5
8. My partner doesn't help me with the child when I need it.	1	2	3	4	5
9. When I tell my partner something about the child, he/she listens.	1	2	3	4	5
10. When the child wants something and I say no, my partner says yes.	1	2	3	4	5
11. My partner uses parenting techniques that I have asked him/her not to use.	1	2	3	4	5
12. In general, I feel we work well together with the child.	1	2	3	4	5
13. When I am trying to settle a dispute between the child and other children, my partner helps me.	1	2	3	4	5
14. When my partner doesn't agree with how I am handling the child, he/she still backs me up in front of the child.	1	2	3	4	5

COPARENTING BEHAVIOR CODING SCALES

VERSION: 8-22-07

Schoppe-Sullivan Lab

- Modified from scales developed by Cowan & Cowan (1996)
- Used in the following published papers:
    - Schoppe, Mangelsdorf, & Frosch (2001)
    - Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale (2004)
    - Schoppe-Sullivan, Mangelsdorf, Brown, & Szewczyk Sokolowski (2007)

…and others yet to come!

Coparenting Behavior Coding Scales

1. **Pleasure**: Qualities

1. Couple appears to enjoy sharing and collaborating in parental role and is able to demonstrate that during the interaction.

2. Each partner appears to take pleasure in other's relationship with child; is able to watch comfortably partner's individual relationship with child.

3. Partners display playfulness and humor with each other about their respective parenting styles/practices and their relationship with their child.

4. How much the couple looks at one another, laughs, or smiles.

Range of scale:

(5) Very high pleasure: Such expressions of pleasure and appreciation as in (4) are very frequent and of high intensity (e.g., shared laughter, etc.). Couple seems to be getting a "kick" out of the interaction, having a blast.

(4) High pleasure: Partners express/show their enjoyment and appreciation of how their partner plays with their child and of the relationship between their partner and their child. Can share involvement with partner or enjoy watching dyad play. Laughs together frequently.

(3) Moderate pleasure: Parent seems to enjoy partner's relationship with child and parenting with partner. However, enjoyment is not present at all times and is generally muted in some way. Parents' enjoyment of each other is partly inferred rather than directly observed. Smiling or laughing a few clear times.

(2) Low pleasure: Though partners do not necessarily show negative feelings toward each other, parents rarely show enjoyment of partner's relationship with child. Their response to partner's relationship is either **neutral or negative** in tone. Rarely smiling or laughing.

(1) Very low pleasure: Virtually no pleasure visible.

Examples:
1. Is the pair having fun while doing the tasks?
2. Are they sharing clear positive comments, laughing, smiling?

2. **Warmth**: Qualities

1. Parents demonstrate affection and positive regard for each other; laugh, hug, touch, smile, say nice things to each other. Note: Physical affection is rare and if seen, definitely consider a "5".

2. Responsive/working together – a feeling of connection between partners is visible.

3. Parents provide emotional support, reassurance, and encouragement for each other that is authentic.

4. Generosity of affect, touch, smiles, and self; this generosity seems authentic.

Range of scale:

(5) Very high warmth: Displays of warmth and affection pervade the episode. Playful, perhaps physically affectionate towards one another.

(4) High warmth: Parents openly, clearly demonstrate affection for each other. This regard for each other may be seen through visible displays of affection or inferred through a feeling of connectedness that exists between them, although, this feeling of warmth is not as pervasive as in (5). Frequently say nice things to one another.

(3) Moderate warmth: Parents display a reasonable amount of positive regard for each other. The sense of connectedness is apparent but not striking. Sometimes say nice things to one another.

(2) Low warmth: Parents are less open and relatively tentative in their display of affection for each other. Limited sense of connectedness between parents. Somewhat unresponsive to partner's affection or gestures.

(1) Very low warmth: Virtually no warmth visible from partners; seem disconnected from each other.

Examples:
1. Looking at one another and laughing or smiling in a positive manner.
2. If one partner is saying something like "I am such a terrible artist," the other might reassure the first by saying "You did a great job, that picture looks just like you!"

3. **Cooperation**: Qualities

    1. Reflects degree to which partners help and support one another in teaching and playing with child.

    2. Help and support between partners can be instrumental as well as emotional.

Range of scale:

    (5) Very high cooperation: Partners are very frequently actively cooperative. They do not negatively interrupt one another, or distract from other's interventions with child. Parents working together consistently and effortlessly.

    (4) High cooperation: Each partner builds on other's efforts to help child; minimum of interrupting or distracting from partner's interventions; cooperation is easy/smooth and frequent. Working together a lot, very actively involved.

    (3) Moderate cooperation: Partners generally work with and support each other, though there are times when helping one another lapses and parents appear less in concert. Working together more than 50% of the time, echoing each other's comments, but not necessarily engaging in truly active cooperation.

    (2) Low cooperation: Partners are usually not supporting or working with each other; partners will appear to have separate ways of working with their child, though they'll share the same approach on occasion. Working together less than 50% of the time, and coparenting is not very supportive, might even say is more hurtful than helpful.

    (1) Very low cooperation: Virtually no effort is made by partners to support and assist each other; parents will appear to be working with the child independently of their partner.

Examples:
1. Parent repeats or elaborates on what the other has said to the child.
2. Partner complies willingly with partner's request for help or task.

Notes: Three is highest score you can get without actively cooperating. Active cooperation means deliberate action by one partner to involve the other partner: Ex: Mother: Let's play Daddy's game. If couple has low level of cooperation (like a 2) and then shows 1-2 instances of active cooperation, bump them up to a 3. If couple has moderate level of cooperation (like a 3) and shows 1-2 instances of active cooperation, bump them up to a 4, etc.

4. **Interactiveness**: Qualities

1. Degree to which parents talk with and engage with each other.

2. Interaction can be both verbal and non-verbal. Non-verbal might take the form of giving glances, touch, smiles, or other expressions, and attempting to elicit those from partner.

3. Interaction can be initiated by either partner.

4. Interaction can have a positive and/or a negative emotional tone; rating is more an assessment of quantity of interaction.

Range of scale:

(5) Very high interactiveness: Very frequent interaction between partners. Partners respond eagerly to interaction with one another. Partners talk a lot and frequently go off topic.

(4) High interactiveness: Partners both initiate and respond to interaction with each other. Interaction between parents facilitates family play and can be conversational. Partners must interact with one another, discussing subjects outside of the task. One off topic conversation in the context of high interaction.

(3) Moderate interactiveness: Partners' interactions usually occur around requirements of the task. Periods where partners are less interactive exist. Partners have one or two exchanges with one another, mostly centered around the task at hand.

(2) Low interactiveness: Partners engage with each other as needed, but interaction is brief. Parents rarely talk with each other unless necessary.

(1) Very low interactiveness: Parents barely engage with each other.

Examples (for higher scores):
1. Parents carry on a conversation about their plans for dinner, tomorrow's activities, etc.
2. Partners get sidetracked. For example, the father may want to color the mother's hair pink, and then they start a discussion about pink hair.

5. **Displeasure**: Qualities

1. Parents express dislike of partner's style of interacting with child either directly or veiled (i.e., sarcasm).

2. Parents express dislike of the quality of partner's relationship with child. (Dislike can be reaction to how positive the relationship is or to how negative it is.)

3. Parents do not enjoy working together.

Range of scale:

(5) Very high displeasure: Partners are both displeased and/or threatened by other partner's relationship with the child; displeasure can be expressed as jealousy (e.g., "he likes playing with you more than playing with me"). Parents display several clear comments.

(4) High displeasure: One partner (or both) actively shows or says they dislike how the other is parenting, or criticizes other's relationship with child. Statements are overt; feelings are clear. Partner may verbalize one clear comment plus several subtle comments.

(3) Moderate displeasure: Predominantly veiled (sarcastic) or subtle comments or tone during interaction suggest parents' dislike of each other's relationship with their child, or on only one occasion a partner shows overt displeasure. One or two subtle comments or one clear, overt comment from a parent.

(2) Low displeasure: Parents are generally unbothered by partner's relationship with their child; however, they might occasionally jab or otherwise indicate some negative feelings. One subtle comment from one of the partners. Some vague comments are made. Not clear. Not accompanied by negative facial reaction.

(1) Very low displeasure: No displeasure visible.

Examples:
1. A strong example might be the father said to the child "Look, Mommy is 'building-challenged!'"
2. A more subtle example might be if the father said to the child "You drew Mommy taller than Daddy."

6. **Coldness**: Qualities

1. Parents seem distant, closed-off, and lack affection for each other.

2. Sense of each parent keeping a distance between him/herself and partner.

3. Parent can show disdain toward partner. Disdain visible through curtness, snubbing, or a general lack of response toward partner and partner's attempts to engage in interaction.

4. Parent seems to withhold affection on purpose or because they have difficulty with intimacy.

Range of scale:

(5) Very high coldness: Non-engagement with partner predominates and appears to be intentional. Parents seem disinterested in partner. Disdain visible.

(4) High coldness: Parents interact with partner, but in a clearly withdrawn or aloof fashion. Captures essence of definition. Parent rejects partner's overtures for closeness (emotional or physical).

(3) Moderate coldness: Parent generally keeps to self during much of the session OR some snubbing (verbal or nonverbal) of partner's attempts to engage or get close to each other (physically or emotionally). One partner says something and the other doesn't respond OR consistent looking up with no response. Emotionally withdrawn.

(2) Low coldness: Some withdrawal visible. Parent is generally open to his/her partner and to their overtures for warmth without necessarily initiating this contact themselves. A slight amount of distance between partners is noticeable. Must have some reason to think partner is emotionally withdrawn.

(1) Very low coldness: Virtually no coldness visible between parents.

Examples:
1. If a mother puts a piece of log on the house and a few seconds later, the father takes it off without telling her, this is a small amount of coldness.
2. If a partner brags to the other that their drawing or building skills are better than theirs.
3. If one partner makes a comment(s) and the other completely disregards it.

Notes:
1. Score using colder parent.
2. To get a score of 4-5, coldness must be intentional. This would happen when one partner makes a comment and the other completely ignores him/her.

7. **Anger**: Qualities

1. Degree to which parents express irritation or dislike toward each other or toward their specific behavior(s).

2. Anger can be expressed in a direct, expressive manner (e.g., sarcasm, irritation), or in a more withholding manner (e.g., by becoming quiet and withdrawn, disengaging from interaction with rejecting or annoyed quality).

Range of scale:

(5) Very high anger: Repeated or continuous hostility is expressed either overtly by parent's yelling, threatening, or blaming partner, or more indirectly through a continual disengagement from and rejection of partner. (For highest level rating, could display one burst of extreme hostility). Typically, though several clear comments.

(4) High anger: Clear hostility aimed at each other or at partner's behavior or requests. Intensity of emotion is clearly quite high and parents have difficulty calming down or letting go of the anger. Partners do not seem out of control, and anger, though quite strong, has some understandable source. One clear, angry comment among other vague angry instances.

(3) Moderate anger: Irritation is shown in a variety of ways (see definition) and lasts for more than just moments or recurs at points throughout the session. One clear, angry comment.

(2) Low anger: Partners show mild irritation with each other's specific behavior. Anger is momentary; partners recover easily and return to non-angry interactions. This irritation may occur one time, and if so would be considered typical. A few vague instances.

(1) Very low anger: No evidence of anger observed.

Examples:
1. If one partner is trying to work on building the house, and is doing it the wrong way, the other partner may say "That's not how you do it." The partner might stop working all together. Both partners seem irritated.
2. Some anger was visible during a building session when a father placed the toy figure of the "mommy" inside of the house innocently and the mother came back at him with "Can the Mommy be outside of the house?!"
3. If one partner repeats something over and over showing some irritation. For example "I have a question. I have a question. I have a question…" (while the other partner and child are engaged in something).

8. **Competition**: Qualities

    1. Parents try to outdo each other's efforts to teach, work, and play with child.

    2. Parents vie to have child respond to their suggestions or to them.

    3. Parents might interrupt or talk over one another.

Range of scale:

(5) Very high competition: Efforts to outdo one another's teaching/playing take precedence over helping child to learn/playing with child or may appear completely independent of the child. Several clear intentional instances are displayed.

(4) High competition: Parents may be helping the child to learn/playing with the child, but their main concern is clearly to outdo each other – either in their parenting or in general – parents try to outdo one another throughout session. One clear instance of **intentional** competition plus several more subtle ones are shown.

(3) Moderate competition: Partners are visibly trying to "one up" each other but only on occasion; competition doesn't interfere with child's play or performance. One clear instance of competition is displayed (or a number of more subtle instances). These instances are not considered intentional (intentional instances get at least a "4").

(2) Low competition: Parents are not engaged in efforts to out-parent or out-do one another for the most part; occasionally a comment or behavior will be made by one partner suggesting that they feel they have a more effective parenting strategy, though it comes across as constructive and not challenging. Partners talk over each other once or twice. Parents "accidentally" work on different parts of the task at the same time. If anything occurs at all, give a 2.

(1) Very low competition: No competition visible. Partners display absolutely no interruptions or other competitive comments.

Examples:

1. One parent might try to discuss something with the child, maybe a lesson on log cabins, and the other parent might interrupt and change the subject.
2. One parent might suggest one color of crayon to the child and the other might hand the child another color.
3. One partner might ask the child "Which drawing do you like better, Mommy's or Daddy's?" Meanwhile, he or she is pointing to their drawing. (High score – intentional.)